

March 8, 2005

Health Policy Committee

Edward Gaffney, Chairman

**Opposition to HB4325 Testimony continued from 3/1/05 by: John J. Palazzo  
MS, PT, DSc (can)ECS**

**PT providers of EDX tests in Michigan**

In 1950's Sara Jane Houtz PT, Detroit Orthopedic Clinic 1955-1973. Wrote text: Groff RA and Houtz SA Manual of Diagnosis and Management of Peripheral Nerve Injuries, JB Lippincott, Phil. 1945

Today the number of physical therapists performing EMG/NCV tests is difficult to determine. Many chose to practice within physician practices to avoid outside pressure or for billing purposes. Until recently insurers only paid the MD/DO for such services. Today 5 Michigan PTs hold ABPTS/ECS board certification in EMG/NCV only 2 practice here at present. The list of those PTs who have practiced includes many who have left the state to practice elsewhere or who were encouraged to discontinue the practice as I was in the 80's.

**Publications**

Physical therapists have contributed substantially to the scientific and research literature relating to EMG. The standards for nerve conduction published by the U.S. Department of Health and Human Services were written by physical therapists

*Guidelines for nerve conduction studies-National Institute of Safety and Health (NIOSH) by R Nelson PT PhD and Nester PT*

*Introduction to EMG and NCT by J Echternach, EdD,PT ,ECS*

*Electrophysiologic Evaluation by R Kellogg, PT PhD*

**N Spielholz PhD PT** contributed chapters in the following texts:

*Intraoperative Monitoring of the Spinal Cord and Selected Peripheral Nerves chap: 22 EDX Med/D umitru*  
*Nerve Conduction and Neuromuscular Transmission: chap 13 Physiological Basis of Rehab Med/Downey*

**State of Washington -SB 6011 Read 02/21/2005.Failed to be heard in committee**

By Senators Rasmussen and Haugen.Referred to Committee on Health & Long-Term Care.  
AN ACT Relating to performance and interpretation of nerve conduction tests and performance of needle electromyography; amending RCW 18.71.030; adding a new section to chapter 18.71 RCW; adding a new section to chapter 18.57 RCW; and creating a new section.

**Texas AG opinion** In 1997, after an inquiry by the Texas State Board of Medical Examiners, the Texas Attorney General ruled that: "The decision by the Board of Physical Therapy Examiners that electromyography is within the scope of a licensed physical therapist is a reasonable one." The Texas Attorney General also found that because of an overlap in the scope of practice of physical therapy and the practice of medicine, "the development of any general rules regulating this activity would require the cooperation of both boards, and is not within the province of either board exclusively." See Texas Attorney General Opinion No. DM-443;

**Example of a turnkey EDX testing program offered to physicians:**

PainCare provides 100% of the equipment, training, education and compliance training. Complete education and training for physician and technician provided at our training facility and at your practice. PainCare provides ongoing management, education and training to ensure a well- run, comprehensive program. **Overreads provided by a physiatrist or neurologist as needed.** PainCare enables you to provide the best patient care with electrodiagnostic medicine at your practice.

To assure good public policy for Michigan health consumers HB4325 must be amended to level the playing field for competition, cost containment and access in the specialty of EMG/NCV services or voted down.  
Thank You

Physical Therapists contribute to notable texts on EMG.

The text referenced below is the large text displayed during the physician's testimony at the House HPC Hearing on HB4325.

Note Neil Spielholz, PhD, is a PT and authored chapter # 22 .

Text Title

ELECTRODIAGNOSTIC MEDICINE

Daniel Dumitru MD, Editor

## 22

# INTRAOPERATIVE MONITORING OF THE SPINAL CORD AND SELECTED PERIPHERAL NERVES

Neil I. Spielholz, Ph.D.

### METHODS OF MONITORING THE PERIPHERAL ASCENDING PATHWAY

### DISTINGUISHING SPINAL FROM NONNEUROLOGIC CAUSES OF VARIABILITY

Stimulation  
Sites of Stimulation  
Recording  
Protocol  
Criteria for Abnormality

### OTHER USES OF THE SOMATOSENSORY EVOKED POTENTIAL

### ALTERNATIVES TO SCALP RECORDINGS

### EFFICACY OF SPINAL CORD MONITORING

SEPs During Cardiac Surgery  
SEPs During Brachial Plexus Repair  
Sciatic Nerve Monitoring During Primary or Revision Hip  
Arthroplasty  
Facial Nerve Monitoring During Removal of Acoustic Neuromas  
Ulnar Nerve Monitoring During Cubital Tunnel Release  
SEPs During Shoulder Arthroplasty

In September, 1977, 34 individuals attended a Workshop at Case Western Reserve University School of Medicine, Rainbow Babies and Childrens Hospital, in Cleveland, Ohio. The meeting, convened by Les Nash, Jr. and Jerald Brodkey, brought together people who had been working, mostly in isolation, on intraoperative monitoring of spinal cord function. A soft-cover "Proceedings" of that meeting went mostly unnoticed. But 10 years later, the field's rapid growth culminated in the American Encephalographic Society publishing its "Guidelines for Intraoperative Monitoring of Sensory Evoked Potentials".<sup>1</sup> Not surprisingly, the field continues to evolve.

Intraoperative monitoring of neural function, especially of sensory pathways, is based on computer-assisted processing techniques that digitally enhance low-level signals. In the jargon of the day, these techniques "improve the signal-to-noise ratio" (see chapter 3). Thus, once the ability to record low amplitude sensory potentials originating within the brain or spinal cord became possible clinically, it was only a matter of time before a need to apply the methodology in the operating room was identified.

Historically, this need originated with corrective procedures on the spinal column, such as during Harrington instrumentation for progressive idiopathic scoliosis.<sup>13,42</sup> The purpose was to alert the surgeon to an impending spinal cord lesion in time to prevent it.<sup>38</sup>

Although the first intraoperative monitor of spinal cord function during scoliosis surgery was the "wake-up test,"<sup>55</sup> the desire for a procedure that would eliminate this maneuver is apparent. As will be seen, however, the wake-up test is still a viable option in certain circumstances.

From the beginning, the somatosensory evoked potential (SEP) was recognized to have certain limitations. The first, and